

SEQUENCE LISTING

<110> Intellectual Property Consulting, Inc.

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YAMASHITA, Toshihide

TANAKA, Hiroyuki

HIGUCHI, Haruhisa

<120> COMPOSITION AND METHOD FOR NERVE REGENERATION

<130> TR010PCT

<140> not yet assigned

<141> not yet assigned

<150> JP 2003-92923

<151> 2003-3-28

<150> JP 2003-125681

<151> 2003-4-30

<150> JP 2003-284559

<151> 2003-7-31

<160> 27

<170> PatentIn version 3.1

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<212> PRT

<213> Homo sapiens

<400> 4

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15

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Pro Thr Gly Leu Tyr Thr His Ser Gly Glu Cys Cys Lys Ala Cys Asn
35 40 45

Leu Gly Glu Gly Val Ala Gln Pro Cys Gly Ala Asn Gln Thr Val Cys
50 55 60

Glu Pro Cys Leu Asp Ser Val Thr Phe Ser Asp Val Val Ser Ala Thr
65 70 75 80

Glu Pro Cys Lys Pro Cys Thr Glu Cys Val Gly Leu Gln Ser Met Ser
85 90 95

Ala Pro Cys Val Glu Ala Asp Asp Ala Val Cys Arg Cys Ala Tyr Gly
100 105 110

Tyr Tyr Gln Asp Glu Thr Thr Gly Arg Cys Glu Ala Cys Arg Val Cys
115 120 125

Glu Ala Gly Ser Gly Leu Val Phe Ser Cys Gln Asp Lys Gln Asn Thr
130 135 140

Val Cys Glu Glu Cys Pro Asp Gly Thr Tyr Ser Asp Glu Ala Asn His
145 150 155 160

Val Asp Pro Cys Leu Pro Cys Thr Val Cys Glu Asp Thr Glu Arg Gln
165 170 175

Leu Arg Glu Cys Thr Arg Trp Ala Asp Ala Glu Cys Glu Glu Ile Pro
180 185 190

Gly Arg Trp Ile Thr Arg Ser Thr Pro Pro Glu Gly Ser Asp Ser Thr
195 200 205

Ala Pro Ser Thr Gln Glu Pro Glu Ala Pro Pro Glu Gln Asp Leu Ile
210 215 220

Ala Ser Thr Val Ala Gly Val Val Thr Thr Val Met Gly Ser Ser Gln
225 230 235 240

Pro Val Val Thr Arg Gly Thr Thr Asp Asn Leu Ile Pro Val Tyr Cys
245 250 255

Ser Ile Leu Ala Ala Val Val Val Gly Leu Val Ala Tyr Ile Ala Phe
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Lys Arg Trp Asn Ser Cys Lys Gln Asn Lys Gln Gly Ala Asn Ser Arg
275 280 285

Pro Val Asn Gln Thr Pro Pro Pro Glu Gly Glu Lys Leu His Ser Asp
290 295 300

Ser Gly Ile Ser Val Asp Ser Gln Ser Leu His Asp Gln Gln Pro His
305 310 315 320

Thr Gln Thr Ala Ser Gly Gln Ala Leu Lys Gly Asp Gly Gly Leu Tyr
325 330 335

Ser Ser Leu Pro Pro Ala Lys Arg Glu Glu Val Glu Lys Leu Leu Asn
340 345 350

Gly Ser Ala Gly Asp Thr Trp Arg His Leu Ala Gly Glu Leu Gly Tyr
355 360 365

Gln Pro Glu His Ile Asp Ser Phe Thr His Glu Ala Cys Pro Val Arg
370 375 380

Ala Leu Leu Ala Ser Trp Ala Thr Gln Asp Ser Ala Thr Leu Asp Ala
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Lys Ser Ile Gln Glu Ile Gln Glu Leu Asp Lys Asp Asp Glu Ser Leu
35 40 45

Arg Lys Tyr Lys Glu Ala Leu Leu Gly Arg Val Ala Val Ser Ala Asp
50 55 60

Pro Asn Val Pro Asn Val Val Val Thr Gly Leu Thr Leu Val Cys Ser
65 70 75 80

Ser Ala Pro Gly Pro Leu Glu Leu Asp Leu Thr Gly Asp Leu Glu Ser
85 90 95

Phe Lys Lys Gln Ser Phe Val Leu Lys Glu Gly Val Glu Tyr Arg Ile
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Lys Ile Ser Phe Arg Val Asn Arg Glu Ile Val Ser Gly Met Lys Tyr
115 120 125

Ile Gln His Thr Tyr Arg Lys Gly Val Lys Ile Asp Lys Thr Asp Tyr
 130 135 140

Met Val Gly Ser Tyr Gly Pro Arg Ala Glu Glu Tyr Glu Phe Leu Thr
 145 150 155 160

Pro Val Glu Glu Ala Pro Lys Gly Met Leu Ala Arg Gly Ser Tyr Ser
 165 170 175

Ile Lys Ser Arg Phe Thr Asp Asp Asp Lys Thr Asp His Leu Ser Trp
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Glu Trp Asn Leu Thr Ile Lys Lys Asp Trp Lys Asp
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<211> 2475

<212> DNA

<213> Rattus norvegicus

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<212> PRT

<213> Rattus norvegicus

<400> 8

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35 40 45

Glu Leu Arg Pro Ala Val Val His Gly Val Trp Tyr Phe Asn Ser Pro
50 55 60

Tyr Pro Lys Asn Tyr Pro Pro Val Val Phe Lys Ser Arg Thr Gln Val
65 70 75 80

Val His Glu Ser Phe Gln Gly Arg Ser Arg Leu Leu Gly Asp Leu Gly
85 90 95

Leu Arg Asn Cys Thr Leu Leu Leu Ser Thr Leu Ser Pro Glu Leu Gly
100 105 110

Gly Lys Tyr Tyr Phe Arg Gly Asp Leu Gly Gly Tyr Asn Gln Tyr Thr
115 120 125

Phe Ser Glu His Ser Val Leu Asp Ile Ile Asn Thr Pro Asn Ile Val
130 135 140

Val Pro Pro Glu Val Val Ala Gly Thr Glu Val Glu Val Ser Cys Met
145 150 155 160

Val Pro Asp Asn Cys Pro Glu Leu Arg Pro Glu Leu Ser Trp Leu Gly
165 170 175

His Glu Gly Leu Gly Glu Pro Thr Val Leu Gly Arg Leu Arg Glu Asp
180 185 190

Glu Gly Thr Trp Val Gln Val Ser Leu Leu His Phe Val Pro Thr Arg
195 200 205

Glu Ala Asn Gly His Arg Leu Gly Cys Gln Ala Ala Phe Pro Asn Thr
210 215 220

Thr Leu Gln Phe Glu Gly Tyr Ala Ser Leu Asp Val Lys Tyr Pro Pro
225 230 235 240

Val Ile Val Glu Met Asn Ser Ser Val Glu Ala Ile Glu Gly Ser His
245 250 255

Val Ser Leu Leu Cys Gly Ala Asp Ser Asn Pro Pro Pro Leu Leu Thr
260 265 270

Trp Met Arg Asp Gly Met Val Leu Arg Glu Ala Val Ala Glu Ser Leu
275 280 285

Tyr Leu Asp Leu Glu Glu Val Thr Pro Ala Glu Asp Gly Ile Tyr Ala
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Cys Leu Ala Glu Asn Ala Tyr Gly Gln Asp Asn Arg Thr Val Glu Leu
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Ser Val Met Tyr Ala Pro Trp Lys Pro Thr Val Asn Gly Thr Val Val
325 330 335

Ala Val Glu Gly Glu Thr Val Ser Ile Leu Cys Ser Thr Gln Ser Asn
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Pro Asp Pro Ile Leu Thr Ile Phe Lys Glu Lys Gln Ile Leu Ala Thr
355 360 365

Val Ile Tyr Glu Ser Gln Leu Gln Leu Glu Leu Pro Ala Val Thr Pro
370 375 380

Glu Asp Asp Gly Glu Tyr Trp Cys Val Ala Glu Asn Gln Tyr Gly Gln
385 390 395 400

Arg Ala Thr Ala Phe Asn Leu Ser Val Glu Phe Ala Pro Ile Ile Leu
405 410 415

Leu Glu Ser His Cys Ala Ala Ala Arg Asp Thr Val Gln Cys Leu Cys
420 425 430

Val Val Lys Ser Asn Pro Glu Pro Ser Val Ala Phe Glu Leu Pro Ser
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Arg Asn Val Thr Val Asn Glu Thr Glu Arg Glu Phe Val Tyr Ser Glu
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485 490 495

Gln Ser Leu Glu Leu Pro Phe Gln Gly Ala His Arg Leu Met Trp Ala
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Lys Ile Gly Pro Val Gly Ala Val Val Ala Phe Ala Ile Leu Ile Ala
515 520 525

Ile Val Cys Tyr Ile Thr Gln Thr Arg Arg Lys Lys Asn Val Thr Glu
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Ser Pro Ser Phe Ser Ala Gly Asp Asn Pro His Val Leu Tyr Ser Pro
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Glu Phe Arg Ile Ser Gly Ala Pro Asp Lys Tyr Glu Ser Glu Lys Arg
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Leu Gly Ser Glu Arg Arg Leu Leu Gly Leu Arg Gly Glu Pro Pro Glu
580 585 590

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Asp Ser Tyr Thr Leu Thr Glu Glu Leu Ala Glu Tyr Ala Glu Ile Arg
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Val Lys
625

<210> 9

<211> 60615

<212> DNA

<213> Mus musculus

<400> 9

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<212> PRT

<213> Mus musculus

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Asp Leu Glu Glu Leu Glu Val Leu Glu Arg Lys Pro Ala Ala Gly Leu
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Ser Ala Ala Pro Val Pro Pro Ala Ala Ala Pro Leu Leu Asp Phe Ser
65 70 75 80

Ser Asp Ser Val Pro Pro Ala Pro Arg Gly Pro Leu Pro Ala Ala Pro
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Pro Thr Ala Pro Glu Arg Gln Pro Ser Trp Glu Arg Ser Pro Ala Ala
100 105 110

Ser Ala Pro Ser Leu Pro Pro Ala Ala Ala Val Leu Pro Ser Lys Leu
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Pro Glu Asp Asp Glu Pro Pro Ala Arg Pro Pro Ala Pro Ala Gly Ala
130 135 140

Ser Pro Leu Ala Glu Pro Ala Ala Pro Pro Ser Thr Pro Ala Ala Pro
145 150 155 160

Lys Arg Arg Gly Ser Gly Ser Val Asp Glu Thr Leu Phe Ala Leu Pro
165 170 175

Ala Ala Ser Glu Pro Val Ile Pro Ser Ser Ala Glu Lys Ile Met Asp
180 185 190

Leu Lys Glu Gln Pro Gly Asn Thr Val Ser Ser Gly Gln Glu Asp Phe
195 200 205

Pro Ser Val Leu Phe Glu Thr Ala Ala Ser Leu Pro Ser Leu Ser Pro
210 215 220

Leu Ser Thr Val Ser Phe Lys Glu His Gly Tyr Leu Gly Asn Leu Ser
225 230 235 240

Ala Val Ala Ser Thr Glu Gly Thr Ile Glu Glu Thr Leu Asn Glu Ala
245 250 255

Ser Arg Glu Leu Pro Glu Arg Ala Thr Asn Pro Phe Val Asn Arg Glu
260 265 270

Ser Ala Glu Phe Ser Val Leu Glu Tyr Ser Glu Met Gly Ser Ser Phe
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Asn Gly Ser Pro Lys Gly Glu Ser Ala Met Leu Val Glu Asn Thr Lys
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Glu Glu Val Ile Val Arg Ser Lys Asp Lys Glu Asp Leu Val Cys Ser
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Ala Ala Leu His Asn Pro Gln Glu Ser Pro Ala Thr Leu Thr Lys Val
325 330 335

Val Lys Glu Asp Gly Val Met Ser Pro Glu Lys Thr Met Asp Ile Phe
340 345 350

Asn Glu Met Lys Met Ser Val Val Ala Pro Val Arg Glu Glu Tyr Ala
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Asp Phe Lys Pro Phe Glu Gln Ala Trp Glu Val Lys Asp Thr Tyr Glu
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Gly Ser Arg Asp Val Leu Ala Ala Arg Ala Asn Met Glu Ser Lys Val
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Asp Lys Lys Cys Phe Glu Asp Ser Leu Glu Gln Lys Gly His Gly Lys
405 410 415

Asp Ser Glu Ser Arg Asn Glu Asn Ala Ser Phe Pro Arg Thr Pro Glu
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Leu Val Lys Asp Gly Ser Arg Ala Tyr Ile Thr Cys Asp Ser Phe Ser
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Ser Ala Thr Glu Ser Thr Ala Ala Asn Ile Phe Pro Val Leu Glu Asp
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His Thr Ser Glu Asn Lys Thr Asp Glu Lys Lys Ile Glu Glu Arg Lys
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Ala Gln Ile Ile Thr Glu Lys Thr Ser Pro Lys Thr Ser Asn Pro Phe
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Leu Val Ala Ile His Asp Ser Glu Ala Asp Tyr Val Thr Thr Asp Asn
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Leu Ser Lys Val Thr Glu Ala Val Val Ala Thr Met Pro Glu Gly Leu
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Thr Pro Asp Leu Val Gln Glu Ala Cys Glu Ser Glu Leu Asn Glu Ala
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Thr Gly Thr Lys Ile Ala Tyr Glu Thr Lys Val Asp Leu Val Gln Thr
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Ser Phe Glu Glu Ala Glu Ala Thr Pro Ser Pro Val Leu Pro Asp Ile
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Val Met Glu Ala Pro Leu Asn Ser Leu Leu Pro Ser Thr Gly Ala Ser
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Val Ala Gln Pro Ser Ala Ser Pro Leu Glu Val Pro Ser Pro Val Ser
610 615 620

Tyr Asp Gly Ile Lys Leu Glu Pro Glu Asn Pro Pro Pro Tyr Glu Glu
625 630 635 640

Ala Met Ser Val Ala Leu Lys Thr Ser Asp Ser Lys Glu Glu Ile Lys
645 650 655

Glu Pro Glu Ser Phe Asn Ala Ala Ala Gln Glu Ala Glu Ala Pro Tyr
660 665 670

Ile Ser Ile Ala Cys Asp Leu Ile Lys Glu Thr Lys Leu Ser Thr Glu
675 680 685

Pro Ser Pro Glu Phe Ser Asn Tyr Ser Glu Ile Ala Lys Phe Glu Lys
690 695 700

Ser Val Pro Asp His Cys Glu Leu Val Asp Asp Ser Ser Pro Glu Ser
705 710 715 720

Glu Pro Val Asp Leu Phe Ser Asp Asp Ser Ile Pro Glu Val Pro Gln
725 730 735

Thr Gln Glu Glu Ala Val Met Leu Met Lys Glu Ser Leu Thr Glu Val
740 745 750

Ser Glu Thr Val Thr Gln His Lys His Lys Glu Arg Leu Ser Ala Ser
755 760 765

Pro Gln Glu Val Gly Lys Pro Tyr Leu Glu Ser Phe Gln Pro Asn Leu
770 775 780

His Ile Thr Lys Asp Ala Ala Ser Asn Glu Ile Pro Thr Leu Thr Lys
785 790 795 800

Lys Glu Thr Ile Ser Leu Gln Met Glu Glu Phe Asn Thr Ala Ile Tyr
805 810 815

Ser Asn Asp Asp Leu Leu Ser Ser Lys Glu Asp Lys Met Lys Glu Ser
820 825 830

Glu Thr Phe Ser Asp Ser Ser Pro Ile Glu Ile Ile Asp Glu Phe Pro
835 840 845

Thr Phe Val Ser Ala Lys Asp Asp Ser Pro Lys Glu Tyr Thr Asp Leu
850 855 860

Glu Val Ser Asn Lys Ser Glu Ile Ala Asn Val Gln Ser Gly Ala Asn
865 870 875 880

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885 890 895

Tyr Pro Lys Asp Glu Ala His Val Ser Asp Glu Phe Ser Lys Ser Arg
900 905 910

Ser Ser Val Ser Lys Val Pro Leu Leu Leu Pro Asn Val Ser Ala Leu
915 920 925

Glu Ser Gln Ile Glu Met Gly Asn Ile Val Lys Pro Lys Val Leu Thr
930 935 940

Lys Glu Ala Glu Glu Lys Leu Pro Ser Asp Thr Glu Lys Glu Asp Arg
945 950 955 960

Ser Leu Thr Ala Val Leu Ser Ala Glu Leu Asn Lys Thr Ser Val Val
965 970 975

Asp Leu Leu Tyr Trp Arg Asp Ile Lys Lys Thr Gly Val Val Phe Gly
980 985 990

Ala Ser Leu Phe Leu Leu Leu Ser Leu Thr Val Phe Ser Ile Val Ser
995 1000 1005

Val Thr Ala Tyr Ile Ala Leu Ala Leu Leu Ser Val Thr Ile Ser
1010 1015 1020

Phe Arg Ile Tyr Lys Gly Val Ile Gln Ala Ile Gln Lys Ser Asp
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Glu Gly His Pro Phe Arg Ala Tyr Leu Glu Ser Glu Val Ala Ile
1040 1045 1050

Ser Glu Glu Leu Val Gln Lys Tyr Ser Asn Ser Ala Leu Gly His
1055 1060 1065

Val Asn Ser Thr Ile Lys Glu Leu Arg Arg Leu Phe Leu Val Asp
1070 1075 1080

Asp Leu Val Asp Ser Leu Lys Phe Ala Val Leu Met Trp Val Phe
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Thr Tyr Val Gly Ala Leu Phe Asn Gly Leu Thr Leu Leu Ile Leu
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Ala Leu Ile Ser Leu Phe Ser Ile Pro Val Ile Tyr Glu Arg His
1115 1120 1125

Gln Ala Gln Ile Asp His Tyr Leu Gly Leu Ala Asn Lys Ser Val
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Val Tyr Val Pro Thr Val Phe Glu Asn Tyr Val Ala Asp Ile Glu Val
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Asp Gly Lys Gln Val Glu Leu Ala Leu Trp Asp Thr Ala Gly Gln Glu
50 55 60

Asp Tyr Asp Arg Leu Arg Pro Leu Ser Tyr Pro Asp Thr Asp Val Ile
65 70 75 80

Leu Met Cys Phe Ser Ile Asp Ser Pro Asp Ser Leu Glu Asn Ile Pro
85 90 95

Glu Lys Trp Thr Pro Glu Val Lys His Phe Cys Pro Asn Val Pro Ile
100 105 110

Ile Leu Val Gly Asn Lys Lys Asp Leu Arg Asn Asp Glu His Thr Arg
115 120 125

Arg Glu Leu Ala Lys Met Lys Gln Glu Pro Val Lys Pro Glu Glu Gly
130 135 140

Arg Asp Met Ala Asn Arg Ile Gly Ala Phe Gly Tyr Met Glu Cys Ser
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<213> Mus musculus

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<213> Mus musculus

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Cys Asp Ala Leu Met Ala Gly Cys Leu Gln Glu Ala Arg Glu Arg Trp
35 40 45

Asn Phe Asp Phe Val Thr Glu Thr Pro Leu Glu Gly Asn Phe Val Trp
50 55 60

Glu Arg Val Arg Ser Leu Gly Leu Pro Lys Val Tyr Leu Ser Pro Gly
65 70 75 80

Ser Arg Ser Arg Asp Asp Leu Gly Gly Asp Lys Arg Pro Ser Thr Ser
85 90 95

Ser Ala Leu Leu Gln Gly Pro Ala Pro Glu Asp His Val Ala Leu Ser
100 105 110

Leu Ser Cys Thr Leu Val Ser Glu Arg Pro Glu Asp Ser Pro Gly Gly
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Pro Gly Thr Ser Gln Gly Arg Lys Arg Arg Gln Thr Ser Leu Thr Asp
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Phe Tyr His Ser Lys Arg Arg Leu Val Phe Cys Lys Arg Lys Pro
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<212> DNA

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Cys Glu Pro Cys Leu Asp Asn Val Thr Phe Ser Asp Val Val Ser Ala
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Thr Glu Pro Cys Lys Pro Cys Thr Glu Cys Leu Gly Leu Gln Ser Met
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Ser Ala Pro Cys Val Glu Ala Asp Asp Ala Val Cys Arg Cys Ala Tyr
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Gly Tyr Tyr Gln Asp Glu Glu Thr Gly His Cys Glu Ala Cys Ser Val
115 120 125

Cys Glu Val Gly Ser Gly Leu Val Phe Ser Cys Gln Asp Lys Gln Asn
130 135 140

Thr Val Cys Glu Glu Cys Pro Glu Gly Thr Tyr Ser Asp Glu Ala Asn
145 150 155 160

His Val Asp Pro Cys Leu Pro Cys Thr Val Cys Glu Asp Thr Glu Arg
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Gln Leu Arg Glu Cys Thr Pro Trp Ala Asp Ala Glu Cys Glu Glu Ile
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Pro Gly Arg Trp Ile Pro Arg Ser Thr Pro Pro Glu Gly Ser Asp Ser
195 200 205

Thr Ala Pro Ser Thr Gln Glu Pro Glu Val Pro Pro Glu Gln Asp Leu
210 215 220

Val Pro Ser Thr Val Ala Asp Met Val Thr Thr Val Met Gly Ser Ser
225 230 235 240

Gln Pro Val Val Thr Arg Gly Thr Thr Asp Asn Leu Ile Pro Val Tyr
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Cys Ser Ile Leu Ala Ala Val Val Val Gly Leu Val Ala Tyr Ile Ala
260 265 270

Phe Lys Arg Trp Asn Ser Cys Lys Gln Asn Lys Gln Gly Ala Asn Ser
275 280 285

Arg Pro Val Asn Gln Thr Pro Pro Pro Glu Gly Glu Lys Leu His Ser
290 295 300

Asp Ser Gly Ile Ser Val Asp Ser Gln Ser Leu His Asp Gln Gln Thr
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His Thr Gln Thr Ala Ser Gly Gln Ala Leu Lys Gly Asp Gly Asn Leu
325 330 335

Tyr Ser Ser Leu Pro Leu Thr Lys Arg Glu Glu Val Glu Lys Leu Leu
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Asn Gly Asp Thr Trp Arg His Leu Ala Gly Glu Leu Gly Tyr Gln Pro
355 360 365

Glu His Ile Asp Ser Phe Thr His Glu Ala Cys Pro Val Arg Ala Leu
370 375 380

Leu Ala Ser Trp Gly Ala Gln Asp Ser Ala Thr Leu Asp Ala Leu Leu
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Asn Lys Asn Ile Asp Asn Phe Leu Asn Arg Tyr Glu Lys Ile Val Lys
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Lys Ile Lys Gly Leu Gln Met Lys Ala Glu Asp Tyr Asp Val Val Lys
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Val Ile Gly Arg Gly Ala Phe Gly Glu Val Gln Leu Val Arg His Lys
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Asp Asp Arg Tyr Leu Tyr Met Val Met Glu Tyr Met Pro Gly Gly Asp
165 170 175

Leu Val Asn Leu Met Ser Asn Tyr Asp Val Pro Glu Lys Trp Ala Lys
180 185 190

Phe Tyr Thr Ala Glu Val Val Leu Ala Leu Asp Ala Ile His Ser Met
195 200 205

Gly Leu Ile His Arg Asp Val Lys Pro Asp Asn Met Leu Leu Asp Lys
210 215 220

His Gly His Leu Lys Leu Ala Asp Phe Gly Thr Cys Met Lys Met Asp
225 230 235 240

Glu Thr Gly Met Val His Cys Asp Thr Ala Val Gly Thr Pro Asp Tyr
245 250 255

Ile Ser Pro Glu Val Leu Lys Ser Gln Gly Gly Asp Gly Phe Tyr Gly
260 265 270

Arg Glu Cys Asp Trp Trp Ser Val Gly Val Phe Leu Tyr Glu Met Leu
275 280 285

Val Gly Asp Thr Pro Phe Tyr Ala Asp Ser Leu Val Gly Thr Tyr Ser
290 295 300

Lys Ile Met Asp His Lys Asn Ser Leu Cys Phe Pro Glu Asp Ala Glu
305 310 315 320

Ile Ser Lys His Ala Lys Asn Leu Ile Cys Ala Phe Leu Thr Asp Arg
325 330 335

Glu Val Arg Leu Gly Arg Asn Gly Val Glu Glu Ile Arg Gln His Pro
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Phe Phe Lys Asn Asp Gln Trp His Trp Asp Asn Ile Arg Glu Thr Ala
355 360 365

Ala Pro Val Val Pro Glu Leu Ser Ser Asp Ile Asp Ser Ser Asn Phe
370 375 380

Asp Asp Ile Glu Asp Asp Lys Gly Asp Val Glu Thr Phe Pro Ile Pro
385 390 395 400

Lys Ala Phe Val Gly Asn Gln Leu Pro Phe Ile Gly Phe Thr Tyr Tyr
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Arg Glu Asn Leu Leu Leu Ser Asp Ser Pro Ser Cys Arg Glu Asn Asp
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Ser Ile Gln Ser Arg Lys Asn Glu Glu Ser Gln Glu Ile Gln Lys Lys
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Leu Tyr Thr Leu Glu Glu His Leu Ser Asn Glu Met Gln Ala Lys Glu
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Glu Leu Glu Gln Lys Cys Lys Ser Val Asn Thr Arg Leu Glu Lys Thr
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Ala Lys Glu Leu Glu Glu Glu Ile Thr Leu Arg Lys Ser Val Glu Ser
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Ala Glu Tyr Gln Arg Lys Ala Asp His Glu Ala Asp Lys Lys Arg Asn
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Gln Gln Leu Glu Ser Asn Asn Arg Asp Leu Gln Asp Lys Asn Cys Leu
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Leu Glu Thr Ala Lys Leu Lys Leu Glu Lys Glu Phe Ile Asn Leu Gln
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Ser Ala Leu Glu Ser Glu Arg Arg Asp Arg Thr His Gly Ser Glu Ile
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Asn Gly Lys Ile Leu Leu Ala Lys Val Glu Leu Glu Lys Arg Gln Leu
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Gln Glu Arg Phe Thr Asp Leu Glu Lys Glu Lys Ser Asn Met Glu Ile
675 680 685

Asp Met Thr Tyr Gln Leu Lys Val Ile Gln Gln Ser Leu Glu Gln Glu
690 695 700

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Ile Tyr Glu Ser Ile Glu Glu Ala Lys Ser Glu Ala Met Lys Glu Met
725 730 735

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740 745 750

Leu Leu Leu Glu Ala Glu Lys Arg Cys Ser Leu Leu Asp Cys Asp Leu
755 760 765

Lys Gln Ser Gln Gln Lys Ile Asn Glu Leu Leu Lys Gln Lys Asp Val
770 775 780

Leu Asn Glu Asp Val Arg Asn Leu Thr Leu Lys Ile Glu Gln Glu Thr
785 790 795 800

Gln Lys Arg Cys Leu Thr Gln Asn Asp Leu Lys Met Gln Thr Gln Gln
805 810 815

Val Asn Thr Leu Lys Met Ser Glu Lys Gln Leu Lys Gln Glu Asn Asn
820 825 830

His Leu Met Glu Met Lys Met Asn Leu Glu Lys Gln Asn Ala Glu Leu
835 840 845

Arg Lys Glu Arg Gln Asp Ala Asp Gly Gln Met Lys Glu Leu Gln Asp
850 855 860

Gln Leu Glu Ala Glu Gln Tyr Phe Ser Thr Leu Tyr Lys Thr Gln Val
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Arg Glu Leu Lys Glu Glu Cys Glu Glu Lys Thr Lys Leu Gly Lys Glu
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Ala Gln Leu Glu Ile Thr Leu Thr Lys Ala Asp Ser Glu Gln Leu Ala
915 920 925

Arg Ser Ile Ala Glu Glu Gln Tyr Ser Asp Leu Glu Lys Glu Lys Ile
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980 985 990

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Ala Glu Ile Met Asn Arg Lys Glu Pro Val Lys Arg Gly Asn Asp
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<400> 23

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35 40 45

Trp Asn Phe Asp Phe Val Thr Glu Thr Pro Leu Glu Gly Asp Phe Ala
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Trp Glu Arg Val Arg Gly Leu Gly Leu Pro Lys Leu Tyr Leu Pro Thr
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Gly Pro Arg Arg Gly Arg Asp Glu Leu Gly Gly Gly Arg Arg Pro Gly
85 90 95

Thr Ser Pro Ala Leu Leu Gln Gly Thr Ala Glu Glu Asp His Val Asp
100 105 110

Leu Ser Leu Ser Cys Thr Leu Val Pro Arg Ser Gly Glu Gln Ala Glu
115 120 125

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His Cys Gln Val Cys Phe Thr Lys Lys Gly Leu Gly Ile Ser Tyr Gly

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<211> 672

<212> PRT

<213> Rattus norvegicus

<400> 27

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Glu Val Lys Asp His Lys Phe Ile Ala Arg Phe Phe Lys Gln Pro Thr

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Phe Cys Ser His Cys Thr Asp Phe Ile Trp Gly Phe Gly Lys Gln Gly
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Phe Gln Cys Gln Val Cys Cys Phe Val Val His Lys Arg Cys His Glu
65 70 75 80

Phe Val Thr Phe Ser Cys Pro Gly Ala Asp Lys Gly Pro Asp Thr Asp
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Asp Pro Arg Ser Lys His Lys Phe Lys Ile His Thr Tyr Gly Ser Pro
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Thr Phe Cys Asp His Cys Gly Ser Leu Leu Tyr Gly Leu Ile His Gln
115 120 125

Gly Met Lys Cys Asp Thr Cys Asp Met Asn Val His Lys Gln Cys Val
130 135 140

Ile Asn Val Pro Ser Leu Cys Gly Met Asp His Thr Glu Lys Arg Gly
145 150 155 160

Arg Ile Tyr Leu Lys Ala Glu Val Thr Asp Glu Lys Leu His Val Thr
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Val Arg Asp Ala Lys Asn Leu Ile Pro Met Asp Pro Asn Gly Leu Ser

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185

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Asp Pro Tyr Val Lys Leu Lys Leu Ile Pro Asp Pro Lys Asn Glu Ser
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Lys Gln Lys Thr Lys Thr Ile Arg Ser Thr Leu Asn Pro Gln Trp Asn
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Glu Ser Phe Thr Phe Lys Leu Lys Pro Ser Asp Lys Asp Arg Arg Leu
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Ser Val Glu Ile Trp Asp Trp Asp Arg Thr Thr Arg Asn Asp Phe Met
245 250 255

Gly Ser Leu Ser Phe Gly Val Ser Glu Leu Met Lys Met Pro Ala Ser
260 265 270

Gly Trp Tyr Lys Leu Leu Asn Gln Glu Glu Gly Glu Tyr Tyr Asn Val
275 280 285

Pro Ile Pro Glu Gly Asp Glu Glu Gly Asn Val Glu Leu Arg Gln Lys
290 295 300

Phe Glu Lys Ala Lys Leu Gly Pro Ala Gly Asn Lys Val Ile Ser Pro
305 310 315 320

Ser Glu Asp Arg Lys Gln Pro Ser Asn Asn Leu Asp Arg Val Lys Leu

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Thr Asp Phe Asn Phe Leu Met Val Leu Gly Lys Gly Ser Phe Gly Lys
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Val Met Leu Ala Asp Arg Lys Gly Thr Glu Glu Leu Tyr Ala Ile Lys
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Ile Leu Lys Lys Asp Val Val Ile Gln Asp Asp Asp Val Glu Cys Thr
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Met Glu Tyr Val Asn Gly Gly Asp Leu Met Tyr His Ile Gln Gln Val
420 425 430

Gly Lys Phe Lys Glu Pro Gln Ala Val Phe Tyr Ala Ala Glu Ile Ser
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Ile Gly Leu Phe Phe Leu His Lys Arg Gly Ile Ile Tyr Arg Asp Leu
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Lys Leu Asp Asn Val Met Leu Asp Ser Glu Gly His Ile Lys Ile Ala

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610

615

620

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